

parks when that use meets the current standards of law and is necessary to provide snowmobile access to adjacent public lands that are open to snowmobile use, or to provide access to private lands within or next to the parks. The bill would continue to allow snowmobile use without change next winter, to provide time for new regulations to be adopted under the bill. And in Yellowstone and Grand Teton, the bill would allow an extra year before it takes effect, to accommodate the phase-out period established by the Park Service in its recent rulemaking. Finally, the bill would affect only a portion of the 670 miles of snowmobile trails in all national parks—or a mere one-half of one percent of all 130,000 miles of trails in the United States.

Let's end inappropriate snowmobile use that shatters the wintertime quiet of the national parks, pollutes their air, disturbs wildlife, and bothers other visitors to the parks. Let's keep our national parks, our most special lands, unimpaired for the enjoyment of today's Americans and future generations.

#### INTRODUCTION OF THE NSF AUTHORIZATION ACT OF 2001

**HON. EDDIE BERNICE JOHNSON**

OF TEXAS

IN THE HOUSE OF REPRESENTATIVES

*Wednesday, April 4, 2001*

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, today, I am introducing a bill to authorize funding for the National Science Foundation (NSF) for the next four fiscal years. The bill provides for increases of 15% for each year, which together with the 13% appropriations increase for fiscal year 2001, will result in a doubling of NSF's budget by the fourth year of the bill.

The need for this legislative proposal to provide a substantial funding increase for NSF is beyond doubt, and the case supporting this bill can be simply stated:

Federally supported basic research is fundamental to the nation's economic health;

NSF plays a vital role in support of basic research and education across all fields of science and engineering; and

There is ample evidence that the current level of federal research investment is inadequate, particularly for the physical sciences, mathematics, and engineering.

The connection between research funding and the strength of the economy has been expounded by such diverse sources as former presidential science advisor Allen Bromley, Federal Reserve Chairman Alan Greenspan, former speaker of the House Newt Gingrich, and the Hart-Rudman Commission on National Security.

Dr. Bromley, who was former President Bush's science advisor from 1989–1993, commented on the inadequacy of the research and development portion of the Administration's FY 2002 funding request in a March 9 New York Times op-ed. He pointed out the potential damage of proposed budget cuts for NSF, NASA and the Department of Energy agencies, which he characterized as the three primary sources of ideas and personnel in the high-tech economy. His key point was that the future budget surpluses on which the large proposed tax cut depends are tied to research investments made today. He said:

The proposed cuts to scientific research are a self-defeating policy. Congress must increase the federal investment in science. No science, no surplus. It's that simple.

The importance of research to the economy was stressed by Federal Reserve Chairman Greenspan in recent testimony before the House Budget Committee also. In response to a question on the need for government support for research, Greenspan responded,

On the issue of research, there is just no question that if you're going to have technology as the base of your economy, which we do, research is crucial. If we don't [enhance the incentives to do research in this economy], we're going to find that we are in a position where we may have awesome technologies, but if you don't continuously nurture them, they won't continue to exist.

The recent report of the U.S. Commission on National Security/21st Century, known as the Hart-Rudman Commission, makes a strong case for the importance of funding for basic research and technology development. The Commission found that, "it is from investment in basic science that the most valuable long-run dividends are realized" and "[the federal] role remains not least because our basic and applied research efforts in areas of critical national interest will not be pursued by a civil sector that emphasizes short- to mid-term return on investment." On the basis of its findings, the Commission recommends a doubling of all federal funding for science and technology research and development by 2010.

In testimony before the House Armed Services Committee on the Hart-Rudman Commission report, former Speaker Gingrich stated that,

The revolution in science requires larger investments in basic research; we are not getting the money today.

He also pointed out the importance of NSF's support for basic science research.

I agree with Mr. Gingrich on the key role NSF plays in sustaining the nation's research enterprise. NSF-supported researchers have collected 100 Nobel Prizes over the years. They have received recognition for work in the fields of physics, chemistry, physiology and medicine, and economics. In nearly every field of science and engineering are examples of NSF-sponsored research that led to important discoveries and applications:

NSF-funded research in atmospheric chemistry identified ozone depletion over the Antarctic, or the "ozone hole" as it has come to be known. In 1986, NSF researchers established chlorofluorocarbons as the probable cause of the Antarctic ozone hole. Since CFCs are used in many commercial applications, this discovery has driven a search for benign substitutes and also led to regulation of CFC emissions.

When most people think of the Internet they mean the World Wide Web and the Web Browsers, like Netscape, that allow them to find the information they seek. The browser made the World Wide Web. The first browser of note was Mosaic, and a student working at the National Center for Supercomputing Applications at the University of Illinois developed it. This is one of NSF's four original Supercomputing Centers.

In industry, the acronym CAD/CAM brings to mind the best in design and manufacturing techniques. NSF-funded research on solid modeling led to the widespread use of Computer-Aided Design and Computer-Aided Man-

ufacturing. The keys to success were advances in the underlying mathematics and in linking the academic and industrial leaders in the field.

NSF's contributions are also manifest through the accomplishments of scientists and engineers, who were trained under NSF awards. It is well known that the great majority of the seminal work in developing such technologies as cell phones, fiber optics, and computer assisted design was performed by private industry—at labs like Corning, AT&T, and Motorola. A recent NSF sponsored study has shown that many scientists and engineers, who went to graduate school on NSF fellowships and research assistantships, often played important roles in the development of these and other technologies. In a number of cases, they became the entrepreneurs who created new firms and markets. To use the words of the authors of the study—"NSF emerges consistently as a major—often the major, source of support for education and training of the Ph.D. scientists and engineers who went on to make major contributions.

The resources NSF provides for support of research and education are relatively small, but the impact is great. The agency expends only 3.8% of federal R&D funds, but provides 23% of basic research funding at academic institutions. For specific research areas, the NSF role at universities is even larger: it funds 36% of research in the physical sciences, 49% in the environmental sciences, 50% in engineering, 72% in mathematics, and 78% in computer science. NSF research awards and direct research fellowships help train over 24,000 graduate students each year, the future scientists and engineers essential to fuel our high-tech economy.

Furthermore, NSF programs help to improve science education for all students and to prepare them for citizenship in a world increasingly dominated by technology. Today we continue to have manpower shortages in many high technology fields. The ideal way to alleviate the shortages is by ensuring that children of all races and both genders receive the basic grounding in science and mathematics that will prepare them to pursue careers as scientists, engineers and technologists. We cannot allow inadequate funding to cripple NSF's efforts in this area.

There is really no debate on whether support of basic research is an appropriate role of the federal government. The basic economic argument is well understood. Industry will underinvest in basic research because individual companies cannot capture the full benefits of advances in fundamental knowledge that come from funding basic research.

The question, rather, is what ought to be the level of the federal research investment? The bill I am introducing takes the position that it is too low, particularly for basic research in the fields for which NSF is a major funding agency: the physical sciences, mathematics, and engineering.

The National Research Council's Board on Science, Technology and Economic Policy analyzed federal funding data for FY 1993 through FY 1997. They found that support, in constant dollars, for chemical engineering had declined by 13%, electrical engineering by 36%, mechanical engineering by 50%, physics by 29%, chemistry by 9%, and mathematics by 6%. Even including the substantial increases for research for biomedical sciences

during this period, total federal research funding for all fields of science and engineering declined by about 1%.

Inadequacies in the size of NSF's budget are evident from the fact that the agency currently funds less than a third of the research applications it receives and about half of those judged to be of high quality. Even when an applicant receives a NSF award, it is usually suboptimal and perhaps half the amount of a NIH award. The current situation leaves researchers in NSF-funded fields scrambling for funds and spending too much of their time chasing limited funding rather than in the laboratory or mentoring students.

The NSF authorization bill I am introducing will provide increases of 15% per year for fiscal years 2002 through 2004. The bill will result in a NSF budget of \$7.7 billion by the final year. The increases provided will allow NSF to go forward with substantial new research initiatives in the mathematical sciences and the social and behavioral sciences and to continue ongoing initiatives in information technology, biodiversity, and nanotechnology. Moreover, the budget growth will allow NSF to—

Increase average grant size and duration;

Fund national research facilities for the earth and atmospheric sciences, astronomy, and the computational and information sciences; and

Support large scientific instruments at colleges and universities.

Finally, the increases will support expansion of NSF's science education programs. Of particular importance will be increased efforts to improve the skills and content knowledge of K-12 science and math teachers and to increase participation in science and engineering by traditionally underrepresented groups. The increases will also expand education research programs, including quantifying the most effective uses of educational technology and strengthening efforts to assess education programs to determine and disseminate information about what methods and approaches are most effective in improving student performance in science and math.

The Coalition for National Science Funding (CNSF), a group of eighty scientific, engineering, and professional societies, universities, and corporations has called for providing no less than \$5.1 billion, a 15% increase, for the NSF in FY 2002 as the next step in doubling the NSF budget. CNSF has stated that:

Our national knowledge base in the sciences, mathematics, and engineering is increasingly important to broad economic and social interests. Doubling the NSF budget by 2006 will fund the crucial investments that the agency makes in key components of this vital knowledge base.

Mr. Speaker, the NSF Authorization Act of 2001 implements the recommendations of CNSF. I hope all my colleagues will join me in ensuring that NSF has the necessary resources to carry out its essential role in support of scientific and engineering research and education by becoming cosponsors and supporters of this authorization bill.

## HONORING OUT FRONT COLORADO ON ITS 25TH ANNIVERSARY

### HON. DIANA DeGETTE

OF COLORADO

IN THE HOUSE OF REPRESENTATIVES

Wednesday, April 4, 2001

Ms. DeGETTE. Mr. Speaker, I rise today to honor the largest gay, lesbian, bisexual, and transgender publication in the Rocky Mountain region, Out Front Colorado, for its tremendous success over the past 25 years. In April 1976, the first edition of Out Front Colorado hit the streets, only seven years after the historic Stonewall Riots in New York City. As a new publication for a growing community, Out Front Colorado began boldly with its first headline "There's No Turning Back." Indeed, in the last 25 years, Out Front Colorado has played an important role in the cultural and community development of gays, lesbians, bisexuals, and transgender people in Colorado with valuable news coverage, arts and entertainment, community events, and photographs that have documented the vibrant history of Colorado's diverse community. And its impact continues to grow. Today, Out Front Colorado is available across the nation from New York City to Los Angeles.

The success of Out Front Colorado can in large measure be attributed to its extraordinary staff. Out Front Colorado was founded by Phil Price, who sought to create a newspaper specifically tailored toward Colorado's gay and lesbian residents. Out Front Colorado became successful in its reach and influence under his direction. Although Phil Price passed away in 1993, the current staff of Out Front Colorado should be commended for continuing the superb work that Phil pioneered.

I am pleased to support Out Front Colorado as a valuable institution to Colorado's community and history and am pleased to recognize there's still no turning back!

## H.R. 1367, THE ATLANTIC HIGHLY MIGRATORY SPECIES CONSERVA- TION ACT OF 2001

### HON. JIM SAXTON

OF NEW JERSEY

IN THE HOUSE OF REPRESENTATIVES

Wednesday, April 4, 2001

Mr. SAXTON. Mr. Speaker, I rise today to introduce H.R. 1367, the Atlantic Highly Migratory Species Conservation Act of 2001. I am pleased to be here today to talk about such an important issue. We stand at an historic crossroads for the conservation of highly migratory species (HMS). The effective management of Atlantic HMS is one of the most complex and difficult challenges facing the National Marine Fisheries Service. These species range widely throughout international waters and the jurisdictions of many coastal nations with diverse political perspectives on how to properly utilize and manage this valuable resource.

The fishing practices and marketing strategies are equally diverse. Unlike most other domestic fisheries, effective multilateral management is the goal of our nation's HMS policy. In fact, Congress placed Atlantic HMS management authority in the hands of the Secretary of Commerce instead of the Regional Fishery Management Councils, in theory, to ensure

that our government maintains an Atlantic-wide perspective and vision.

It is my firm belief that this Congress, together with thousands of concerned fisherman and conservationists, have a unique opportunity to work together to aggressively protect and rebuild stocks of HMS such as billfish, sharks and swordfish.

In August of 1999, I was approached by representatives of the longline industry and three recreation/conservation fishing organizations who suggested I sponsor legislation to: (1) permanently close an area of U.S. waters in the South Atlantic to pelagic longline fishing; (2) establish two time-area closures in the Gulf of Mexico to pelagic longlining; (3) reduce billfish bycatch and the harvesting of juvenile swordfish; and (4) provide affected fishermen a buyout to compensate them for the loss of fishing grounds and fishing opportunities. I remain a strong supporter of this concept.

I first began work on this important issue because I feel very strongly that a balance can be achieved. Prior to and following the introduction of H.R. 3331, my first bill targeting these critical needs, I met with, and spoke to, a number of pelagic longline fisherman, recreational fisherman and their organizations, and a number of conservation and environmental groups.

I introduced H.R. 3331, in the 106th Congress, in part, because the National Marine Fisheries Service established the pelagic longline fishery as a limited-entry fishery through the HMS Fishery Management Plan. As NMFS is well aware, I have been asking them to take this action for many years. The establishment of a limited access system is critical to reduce harvesting capacity through attrition or a buyback program. Hence, once pelagic longline permits for HMS are bought-out as proposed in my bill, there would be no further vessels re-entering the fishery.

I believe in this concept because the current management system whereby NMFS publishes a regulatory rule that is challenged by seemingly endless lawsuits is not an effective way of promoting sound HMS fishery management. This system has to change.

The International Convention for the Conservation of Atlantic Tunas (ICCAT), led by the United States, approved a ten-year rebuilding plan for North Atlantic swordfish. Although the final approved plan did not go as far as I would have liked in reducing the annual quota internationally, it nevertheless set an important tone for conservation. I commend the U.S. ICCAT Commissioners for their tenacity in getting the rebuilding plan approved.

This is the continuation of an arduous process, but I am confident that we can provide a conservation measure that is good for our beleaguered highly migratory species of fish. I look forward to continuing to fight until this measure is passed and becomes law.

## INTERNATIONAL ROMA DAY REVISITED

### HON. CHRISTOPHER H. SMITH

OF NEW JERSEY

IN THE HOUSE OF REPRESENTATIVES

Wednesday, April 4, 2001

Mr. SMITH of New Jersey. Mr. Speaker, on International Roma Day last year, the OSCE High Commissioner on National Minorities released a detailed report on the situation of